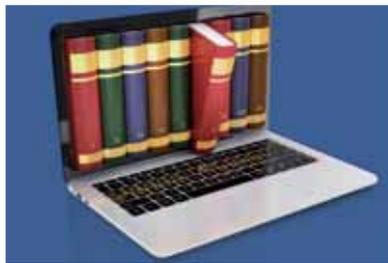




INTERNET BROADBAND FOR AN INCLUSIVE DIGITAL SOCIETY

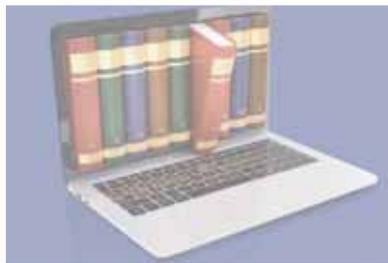


UNCTAD CURRENT STUDIES ON SCIENCE, TECHNOLOGY AND INNOVATION. N°11





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List of Abbreviations

2G/3G/4G	second/third/fourth generation
A2K	access to knowledge
DSL	digital subscriber line
FTTH	fibre to the home
G3ict	Global Initiative for Inclusive ICTs
GDP	gross domestic product
ICT	information and communications technology
IPR	intellectual property right
ITU	International Telecommunication Union
LDC	least developed country
OECD	Organization for Economic Cooperation and Development
SME	small and medium-sized enterprise
UNCTAD	United Nations Conference on Trade and Development
UNESCO	United Nations Educational, Scientific and Cultural Organization
VSAT	very small aperture terminal
WiMAX	Worldwide Interoperability for Microwave Access
WTO	World Trade Organization

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Introduction

Internet broadband is shorthand for a range of capabilities enabled by the convergence of computers, the Internet, smart devices, high-speed wireline and wireless networks, and a plethora of innovative applications and services that these technologies make available. Compared with narrowband technologies such as dial-up telephone connections, which deliver a maximum data rate of 56 kilobits per second (kbps), broadband Internet refers to high-speed public Internet access. Although the boundary between narrowband and broadband is blurry, the International Telecommunication Union (ITU) describes broadband as Internet connections with downstream speeds of 256 kbps or more (ITU, 2010).

The precipitous growth of broadband networks and services over the past decade has been sparked by a combination of continuing rapid technological developments across the information and communications technology (ICT) landscape and the commensurate spectacular rise of popular applications and services that are made possible by broadband connectivity. These changes have also been increasing the socioeconomic development impact of broadband ICTs on various spheres, ranging from education to health care, and political and economic inclusion. Today, broadband ICT policies are increasingly becoming an integral part of national development plans and poverty reduction strategies to fight poverty and facilitate economic and social development. Hence, access to broadband ICT networks, services and applications represents an

in least developed countries (LDCs).¹ This has been noted in a variety of forums, including the Broadband Commission, the World Summit on the Information Society and the United Nations Educational, Scientific and Cultural Organization (UNESCO). Economic and Social Council resolution 2012/5 states that “there is a growing digital divide in the availability, affordability, quality of access and use of broadband between high-income countries and other regions, with least-developed countries and Africa as a continent lagging behind the rest of the world...”

All stakeholders have been called upon to maintain as a priority concern the bridging of the digital divide and to continue to focus on pro-poor ICT policies and applications, including access to broadband at the grass-roots level, with a view to narrowing the digital divide between and within countries. Innovative approaches that will encourage universal access to affordable broadband infrastructure in developing countries need to be devised. During its 2012 meeting, the Commission on Science and Technology for Development proposed to share and analyse policies and best practices intended to be comprehensive and inclusive, aimed at reducing the urban-rural gap in broadband access in developing countries and the digital divide throughout, especially in LDCs and landlocked developing countries.

The Commission also invited member States to use the multi-stakeholder approach in drawing up their national broadband plans and to develop

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